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April 28, 2014

Rob Savidge  
Sediment Control Inspector  
City of Annapolis  
Department of Neighborhood & Environmental Programs  
145 Gorman Street, 3<sup>rd</sup> Floor  
Annapolis, Maryland 21401

Re: Aris T. Allen Boulevard Residential/Rocky Gorge PUD  
GRD14-0006, Sediment Control Review

Dear Mr. Savidge:

McLaren Engineering Group respectfully submits the following responses to your review comments received via email, dated 3-5-2014, for the above referenced Grading Permit Plans and Application.

**Sediment & Erosion Control:**

1. COMMENT: *Steep slopes and highly erodible soils*
  - a. *Additional steps may need to be taken to ensure that the highly erodible soils and steep slopes on the site are not impacted, so that the downslope stream and wetlands are not degraded by sediment pollution.*
  - b. *Show steep slopes (15% and greater) on the grading plan sheets C6.00-C6.20.*
  - c. *Show highly erodible soils on the grading plan sheets C6.00-C6.20. Highly erodible soils are those with a K factor greater than 0.35. The AdB and DnA soils have K factors of 0.37.*
  - d. *Show a 50' buffer around these steep slopes and highly erodible soils. The 50' buffer should not be impacted. If you feel the buffers no need to be impacted, please provide justification including enhanced protection measures to protect these areas.*
  - e. *Additional comments will be made that may impact the design, once the natural resources have been properly mapped on the grading plans.*
  - f. *Show the steep slopes (=15% & =25%), highly erodible soils (AdB & DnA), the 100' stream/wetland buffer.*

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**RESPONSE:** See below...

- a) Per review comment letter, from Frank Biba, dated 4/10/14, the steep slopes and highly erodible soils located throughout the limit of disturbance do not warrant additional protection or preservation from a sediment control perspective.
- b) Refer to the Forest Stand Delineation (FSD) and Natural Resource Inventory (NRI) for illustration of steep slopes. It would be too confusing to show this information on the grading plan sheets (C6.00-C6.20), and would detract from information shown on the grading plan sheet necessary to complete construction.
- c) Refer to the Forest Stand Delineation (FSD) and Natural Resource Inventory (NRI) for illustration of highly erodible soils. It would be too confusing to show this information on the grading plan sheets (C6.00-C6.20), and would detract from information shown on the grading plan sheet necessary to complete construction.
- d) A 50' buffer is no longer required around steep slopes and highly erodible soils, on-site, as these no longer warrant protection or preservation.
- e) Noted. No response required.
- f) Refer to the Forest Stand Delineation (FSD) and Natural Resource Inventory (NRI) for illustration of steep slopes, highly erodible soils, and the 100' stream/wetland buffer.
- g) The natural hydrology of the site has been maintained as much as possible.

2. **COMMENT:** *The natural hydrology of the site must be maintained throughout construction and post construction. Adjust the sediment controls as needed to accomplish this.*

**RESPONSE:** The natural hydrology of the site is being maintained as much as possible.

3. **COMMENT:** *The sediment and erosion control measures in the sediment control plan must utilize the existing drainage patterns and minimize grading. The proposed ravine at the end of the stone outlet structure does not meet these requirements, would create unnecessary disturbance, and would create steep slopes (another erosion threat). To avoid the need to install this ravine, move the sediment trap to the west of the proposed development, into or on the edge of the part II area. This will allow the sediment trap outfall to utilize the existing drainage.*

**RESPONSE:** The ravine has been removed, and the full storm drain trunk line is now proposed in order to outfall the sediment trap. The steep slopes, associated

with the ravine, have been eliminated. The sediment trap cannot be relocated as the trap location coincides with micro-bioretenment (MB-3). The sediment trap will be converted to the micro-bioretenment facility as construction nears completion. This is consistent with standard development practices.

4. COMMENT: *Change all silt fence to super silt fence. The City does not allow regular, wooden stake silt fence to be used. Reinforced silt fence (see detail from the Soil Conservation District) may be used in low-risk areas.*

**RESPONSE:** All silt fence has now been changed to super silt fence.

5. COMMENT: *Choose one stabilized construction entrance to use, and locate the staging area near this entrance. This will help minimize disturbance. All vehicle staging areas and stockpile areas must be mechanically stabilized.*

**RESPONSE:** Per our meeting with review staff, and discussions we are continuing to proposed two SCE locations. A SCE along Yawl Road is required for the Yawl Road extension, and the SCE along Aris T. Allen Boulevard will help reduce the amount of construction traffic traveling through the adjacent subdivision.

6. COMMENT: *Alter the sequence of construction to add these comments: install the base stone for internal streets before buildings go vertical. The entire site must be stabilized before going vertical.*

**RESPONSE:** The sequence of construction has been altered to include the above referenced notes.

7. COMMENT: *After the property is re-graded, additional sediment controls (reinforced silt fence) will need to be installed around the individual lots, or group of lots, being worked. Provide for interim sediment control plans that will detail these sediment control measures.*

**RESPONSE:** Insets have been provided within the ESC detail sheets, to show additional on-lot sediment controls for both the single family and townhouse units.

8. COMMENT: *Put a scale on sheet c10.00.*

**RESPONSE:** A graphic scale has been added to sheet C10.00.

9. **COMMENT:** *Include a narrative describing how erosion and sediment control will be integrated into the stormwater management strategy using ESD in accordance with The 2000 Maryland Stormwater Design Manual, Chapter 5, Supplement 1.*

**RESPONSE:** A narrative describing how erosion and sediment control will be integrated into the stormwater management strategy has been included in the Sediment Control plans, specifically on the general notes sheet.

10. **COMMENT:** *Existing contours need to be utilized as much as possible to minimize the amount of clearing and grading.*

**RESPONSE:** The existing contours have been utilized as much as can be in order to facilitate the proposed site development.

#### **Annapolis Conservancy Board Preliminary Comments:**

1. **COMMENT:** *Expand the conservation easement to include the adjacent steep slopes, per the Planning Commission comment #17.*

**RESPONSE:** It has been determined, by the City, that the adjacent steep slopes do not warrant protection or preservation; therefore, further measures are no longer required. Thus the existing, recorded conservation easement is currently sufficient in size and does not need to be expanded.

#### **Miscellaneous Comments:**

1. **COMMENT:** *Steep slopes should have been listed as priority areas in the forest stand delineation. The FCA Technical Manual says "trees, shrubs, and plants on steep slopes [are priority retention areas]."*

**RESPONSE:** The FSD plans and narrative have been revised; however, it has been determined by City Staff that the areas of steep slopes on-site are isolated and do not warrant protection or preservation.

2. **COMMENT:** *Consider separating the town homes and larger homes into different construction phases to minimize the risk of pollution downstream wetlands and streams. If this cannot be accomplished, please explain why and please strengthen the sediment controls proposed in the interim sediment control plan.*

**RESPONSE:** Further construction phasing would not be feasible for this site. The project is continuing to be phased as currently shown. The sediment controls



**shown, as revised, have been strengthened to provide adequate protection of the downstream drainage areas.**

3. **COMMENT:** *Adjust the construction to avoid steep slopes, erodible soils, and their buffers.*

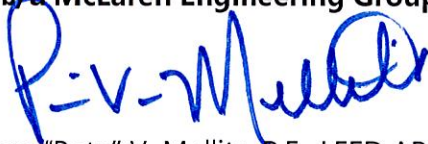
**RESPONSE:** Per review comment letter, from Frank Biba, dated 4/10/14, steep slopes, erodible soils, and any associated buffers do not warrant additional protection or preservation from a sediment control perspective.

Please submit eight (8) copies of the revised plans to the Dept. of Neighborhood & Environmental Programs. Note, this does not include possible Environmental, Planning & Zoning, Public Works or Stormwater Management plan review comments.

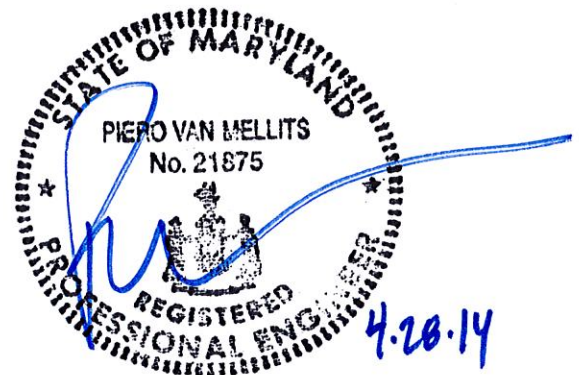
Thank you for your assistance, and if you have any questions or comments, please contact Pete Mellits at McLaren Engineering Group at 410-243-8787 or via e-mail at [PMellits@MGMcLaren.com](mailto:PMellits@MGMcLaren.com).

Very truly yours,

The Office of  
**McLaren Technical Services, Inc.**  
**d/b/a McLaren Engineering Group**



Piero "Pete" V. Mellits, P.E., LEED AP  
Civil Engineering Manager



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